

Coal Ash Release Fact Sheet

Revised February 20, 2014

The Virginia Department of Health (VDH) is working with Duke Energy, federal, state and local government agencies to protect the health of residents in Pittsylvania, Halifax and Mecklenburg counties and the city of Danville. The information below informs people about the recent coal ash spill in Eden, NC, and provides up-to-date information on VDH's role in responding to the event.

What happened?

The city of Danville was notified by Duke Energy at 6 pm on Sunday, February 2, 2014 of a release of coal ash into the Dan River approximately 15 to 20 miles upstream. The city of Danville water treatment plant operators noticed an increase in turbidity (measure of water cloudiness) in raw (untreated) water from the Dan River at around 11 pm on Sunday, February 2, 2014. For more information about the coal ash release, please see press releases from Duke Energy, the company that operates the coal plant, at <http://www.duke-energy.com/news/2014.asp>; the North Carolina Department of Environment and Natural Resources <http://portal.ncdenr.org/web/guest/dan-river-spill>; and the U.S. Environmental Protection Agency <http://www.epa.gov/region4/duke-energy/>.

What is coal ash?

Coal ash is made of minerals, just like those in soil and rocks. It is a gray, powdery material that is leftover after coal is burned. Coal fly ash is collected with air pollution control equipment at power plants and is often kept wet (in holding ponds) to prevent it from getting into the air.

Is exposure to coal ash likely to cause harm?

In general, coal ash may contain the following metals: aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, thallium, tin, titanium, vanadium, and zinc. Exposure to coal ash can occur through contact with the skin, accidental ingestion, and inhalation. Short-term exposure to coal ash is unlikely to have any adverse health effects. VDH continues to work with federal, state, and local agencies to evaluate available sampling data and keep residents informed.

Is my drinking water safe?

Throughout this event, drinking water from the City of Danville and the Town of South Boston (Halifax County Service Authority) water treatment facilities has met drinking water standards. The treated water is safe to drink. The waterworks have been able to treat the water primarily through filtration. Raw and finished water samples continue to be collected and analyzed several times a day.

If you have a private well and live in Virginia, please consult with Southside Health District at (434) 799-5190. If you live in North Carolina and are concerned about your drinking water, please contact the Public Information Officer for NC Department of Water Resources at (919) 707-9014.

Is the Dan River safe to use for recreation?

VDH recommends exercising caution when using the Dan River for primary contact purposes (swimming, boating, kayaking, etc). River water is being monitored for coal ash contaminants. The monitored levels indicate that no illness will result from accidental ingestion of river water. However, direct contact with coal ash may cause minor skin irritation. Avoid contact with submerged or floating ash and if ash is contacted, wash off with soap and water.

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Is it safe to eat fish from the Dan River in Virginia?

Due to historical activities not related to the coal ash spill, VDH has an existing fish consumption advisory that extends from Danville to the Kerr Reservoir (Virginia side) and includes parts of the Hyco River and Banister River. These river segments contain species of fish with elevated levels of methylmercury and polychlorinated biphenyls (PCBs). More information is available at www.vdh.virginia.gov/Epidemiology/dee/PublicHealthToxicology/Advisories/

In general, inorganic metals (such as the ones that are found in coal ash) do not significantly build up in fish. However, inorganic metals like mercury can be converted over time to its organic form. The organic form of mercury, methylmercury, can accumulate in fish tissue. A measureable increase in methylmercury in fish tissue would likely take several years and would depend on the ongoing levels of mercury present in the water body. As a general food safety tip, VDH always advises to eat only fish tissue and to remove of any fish guts or organs before consuming fish. Eating only the fish tissue will also help reduce any exposure to inorganic metals that may be present in low levels.

Why hasn't Virginia expanded its fish consumption advisory in response to the spill?

VDH considers several factors when deciding to update or issue a new fish consumption advisory. These factors include fish tissue results along with other toxicological factors such as body weight, dosage, and expected duration of exposure. In general, fish consumption advisories occur when the level of contaminants in fish exceed health-based comparison values. VDH is receiving regular (usually daily) river water results from partners involved in the coal ash spill response, including Duke Energy. At this time, contaminant levels (of metals) in the Dan River are low and are unlikely to eventually accumulate in fish tissue at levels of concern. When a much larger amount of coal ash was released to the Emory River in Tennessee in 2008, fish tissue sampling results (for metals) collected the following year were all well below human health protection standards expect for two catfish samples. VDH will work closely with local, state, and federal agencies to evaluate any available fish tissue data and update fish consumption advisories as needed.

Is it safe to eat fish from the Dan River in North Carolina?

For a list of current fish consumption advisories issued by the Occupational and Environmental Epidemiology Branch at the NC Division of Public Health, please see <http://epi.publichealth.nc.gov/oeo/fish/advisories.html#D>.

Is it safe for farm animals to drink from the river?

At this time, there is no risk to livestock or horses. The river water sampling results (for various metals) are several orders of magnitude below the level that could cause clinical illness in livestock or horses.

What is VDH doing to protect my health?

Several VDH offices, including the Pittsylvania/Danville Health District, Office of Drinking Water, and Office of Epidemiology, will continue to work together to assess sampling results and determine if there are any risks to Virginia residents.

Who do I contact with questions?

Contact VDH's Danville Field Office for the Office of Drinking Water at (434) 836-8416 with drinking water concerns. Contact the Pittsylvania/Danville Health District at (434) 432-7232 or the Southside Health District at (434) 799-5190 with health concerns related to recreational use of the Dan River. You may also contact VDH's Division of Environmental Epidemiology at (804) 864-8111 with questions about coal ash or health effects. If you still have concerns about your health after speaking with VDH, tell your health care provider and provide them with this fact sheet to make sure they have up-to-date information regarding the spill.